

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
7 April 2005 (07.04.2005)

PCT

(10) International Publication Number
WO 2005/030115 A1

(51) International Patent Classification⁷: A61J 3/10,
B30B 11/02

(21) International Application Number:
PCT/GB2004/004092

(22) International Filing Date:
24 September 2004 (24.09.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
0322358.3 24 September 2003 (24.09.2003) GB

(71) Applicant (for US only): **BIOPROGRESS TECHNOLOGY LIMITED** [GB/GB]; March Trading Estate, Hostmoor Avenue, March, Cambridgeshire PE15 0AX (GB).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **TECKOE, Jason**

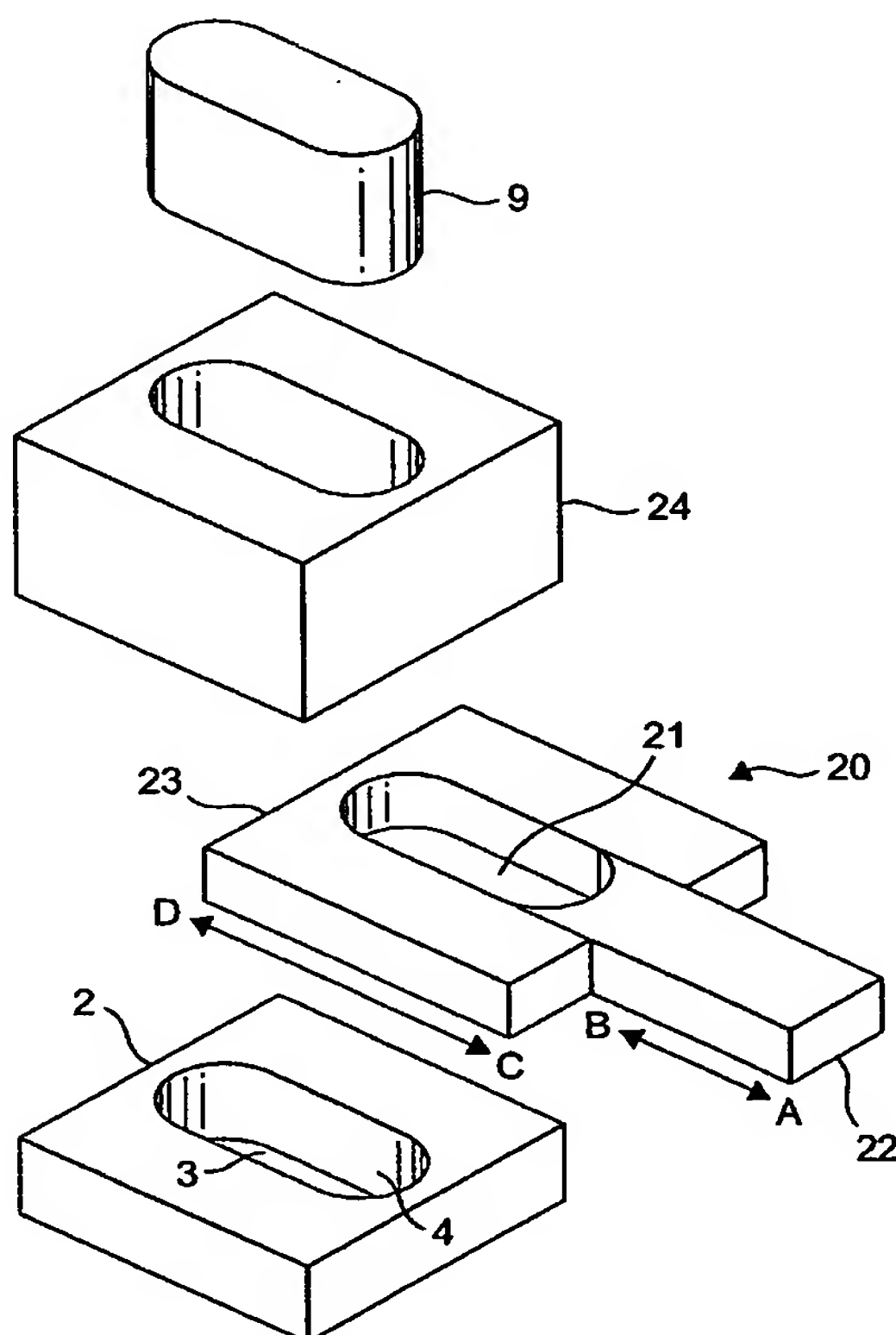
[GB/GB]; 23 West End, Ely, Cambridgeshire CB6 3AY (GB). **MERWOOD, Colin** [GB/GB]; 2A Castle Avenue, Warblington, Havant, Hampshire PO9 2RY (GB). **KESSEL, Stephen, Ronald** [GB/GB]; 9 High Street, Warboys, Cambridgeshire PE28 2RH (GB).

(74) Agent: **HILL, Justin, John**; McDermott Will & Emery, 7 Bishopsgate, London EC2N 3AR (GB).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

[Continued on next page]

(54) Title: APPARATUS FOR COMPACTING POWDER



(57) Abstract: An apparatus for compacting a powder comprises: i) a die (2) including a piston chamber (4) having an entrance for receiving a piston; ii) dosing means (20) adapted to dispense a free flowing powder through said entrance and into said piston chamber; and iii) a piston (9) having a cross-sectional area reciprocal with the piston chamber (4) and being adapted such that in use the piston enters said chamber, thereby to compact any powder in said chamber, and then exits said chamber. The dosing means (20) comprises a plurality of juxtaposed components (22, 23) between which components is formed a dosing cavity (21) for receiving and dispensing powder. The volume of the cavity (21) and at least the cross-sectional area of the cavity perpendicular to the direction of flow of the powder when the powder is dispensed into the piston chamber (4) are variable by adjustment of the respective positions of the juxtaposed components (22, 23) such that when powder is received into the dosing cavity (21) said volume and cross-sectional area is greater than when powder is dispensed from said cavity into said piston chamber (4). The apparatus is useful for reducing dust in powder compaction processes.



(84) Designated States (*unless otherwise indicated, for every kind of regional protection available*): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

Published:

— *with international search report*